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To M. Hore with the kind regards of The author.

THE

MEDICAL FRIEND.



THE

# MEDICAL FRIEND.

OR

ADVICE FOR THE PRESERVATION OF HEALTH.

RV

JAMES PAXTON, M.D.



#### LEWIS CORNARO.

An extraordinary instance of longevity; who, though naturally of an irritable constitution, and intemperate in early life, yet by strict regimen corrected the morbid tendencies of his body, and died calmly at the age of an hundred years.

OXFORD,

PRINTED FOR J. VINCENT.

1843.



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### PREFACE.

It is more important to preserve health than to cure disease: and though it is true, that the "whole need not a physician, but the sick," and books on the care of the body may excite the smile of those who are in the pride and superfluity of health, yet be assured that attention to sound medical precepts will considerably improve the enjoyment of the healthy, and prolong the life of the weakly in constitution, and those advanced beyond the meridian of life.

The best constitution is constantly surrounded by so many causes which tend to its derangement, that there are comparatively few who possess perfect health. Hence the

inestimable benefit of the advice of a learned and faithful Medical Friend is of more value than fine gold. The records of science annually shew how much mankind are indebted to the learned in the medical sciences; and it is of as much importance to attend to their advice as to take their medicine.

The health of both body and mind is deserving of much more attention than it usually receives.

Life may be considered to embrace three periods of existence: first, the period of preparation; second, the period of usefulness; third, the period of decline. The Medical Friend is here desirous to give instruction how best to improve and economize each term of existence, so as not to exceed the income of health.

If it be asked, whether we are to live ac-

cording to the uncompromising rules of a physician; I answer, Yes. And though we may imagine that nature has given us a licence, the infringments of her laws will subject us sooner or later to protracted sufferings or a premature grave.

Nor can there be a more important service rendered to mankind, than to point out certain methods by which some of the most severe calamities of life may be averted, and diseases prevented from sapping the foundation of the healthful structure.

The health is to be preserved, and not trifled with. Have you good health? Endeavour to keep it. Are there indications of disease? Consult an able medical practitioner, and follow closely his advice.

Persons are not attacked by serious disease without due notice, and perhaps repeated

warnings, and, in general, if we see the approach of the disorder, we may entirely avert it, or at least always moderate its severity.

It is a dangerous presumption for persons unacquainted with the nature of disease to prescribe for the sick. Errors of ignorance and prejudice in our mode of living are daily committed, which sow deeply the seeds of disease, and entail miseries, which render life a burden rather than a blessing.

With bodily health should be associated a sound mind, for the connexion is intimate. If the body languishes, the mental powers fall short of that energy and activity of which otherwise they would be capable; and that irritability to which weakness and ill health are prone, is sure to act unfavourably on the moral feelings.

Health is committed to us as a precious

treasure; but the usages of the present state of society lead to its abuse, or to a positive waste of this valuable gift. Thus the student will read at late hours,—the convivial will commit excesses,—the intemperate will drink those fluids which experience shews us are injurious to the body and demoralizing to the mind. So also necessity, or the love of gain, shuts up numerous classes of operatives in factories or workshops, until they are pale, weakly, and wretched.

The economy of human life, or the art of preserving health and prolonging our days, therefore, ought to be carefully studied, both for our own comfort, and for the benefit of our poorer neighbours. The regimen here laid down should be adopted in infancy; conducted under rules of judicious temperance through the middle stage; and strictly main-

tained during the autumn and winter of life.

Let not any one suppose that too much is written on the subject of diet and regimen, for the health and strength of the body mainly depend on the healthy performance of the process of digestion. The powers of the mind, the evenness of the temper, and the kindness of the disposition, and many moral qualities, at least to a great extent, are dependent on the physical condition of the body. We must therefore learn that those pleasures and gratifications are to be avoided, which result in pain or constitutional disorders. Health of body and mind are precious things, and the only ones, in truth, that a person should give his time, labour, and goods to obtain or preserve. Health should be pursued in defiance of fashion, or gratifying vanity, or

following the customs of the world, it being the true zest of all other enjoyments.

Thus, as the flame of a lamp, to burn brightly, requires air and protection from the wind and rain, and other causes capable of extinguishing it; so, with respect to human life, our ease and comfort, and even our existence, require similar care, that the lamp of life may answer some useful and agreeable purpose.

The present little work will give directions how we should aim to keep the body in such a condition, that our present circumstances shall be pleasant, and the future undreaded.

To those who wish to gain a knowledge of the human structure and its functions, so far as is necessary for its conservation, the following works cannot be too strongly recommended:—Dr. Southwood Smith's Book of Health, or an Exposition of the Physical

and Mental Constitution of Man. Dr. Hodgkin, on the Means of Preserving Health. Dr. Johnson, on the Economy of Health from the Cradle to the Grave. Dr. Edwards, on the Influence of Medical Agents on Life, with Notes by Dr. Hodgkin. Sir Anthony Carlisle's Practical Observations on the Preservation of Health and the Prevention of Diseases. Mayo's Philosophy of Living. Dr. Ticknor's Medical Philosophy. And Letters to a Brother on the Care of the Health, by Mr. Johnson, Surgeon.

Numerous British and Foreign authors on the subject have been consulted, and their sentiments occasionally echoed, so that, if the thoughts be not original, it may be satisfactory to the reader to know that I have the sanction of the best authorities.

## THE MEDICAL FRIEND.

# EFFECTS OF THE AIR ON THE CONSTITUTION.

The air has a powerful influence on health: and although our best chemists have been unable to detect any sensible difference in the constitution of the atmosphere of high and low situations, or of town and country, the failure must prove some defect in the process employed in its examination. Let any one pass a day in a crowded city, and another day in a pleasant part of the country, and his sensations and animal spirits will testify which is the most exhilarating.

The unhealthy appearance of the poor in large towns often arises from their residence in close and ill-ventilated apartments.

The arrangement of houses in narrow streets, confined courts, and places without thorough-

fares, tends very powerfully to render the atmospheric causes of disease more certainly noxious,

It is avarice alone which crowds the poor into their unhealthy abodes.

The seeds of diseases are dissipated in the air: so that in a confined room, where there is sickness, the poison must consequently be more concentrated, and a person more liable to be infected.

In narrow lanes, in dark passages, and in situations where human beings are found of immoral and dirty habits, ground down moreover by poverty, labour, and misfortune,—there vitality is powerfully affected, and epidemics appear, and grow into contagion.

The habits and avocations of most females predispose to disease, merely from being less exposed to the healthful influence of the open air.

Even during the night, complete ventilation in your bed-chamber is needful, to procure refreshing repose, and to preserve health.

Light greatly promotes bodily health: for as the presence or absence of light is observed to affect plants, so is man equally affected by it, and he becomes pallid and sickly in a dark and gloomy habitation.

However agreeable it may be to shut out the

glare of the summer sun; yet all windows which prevent the entrance of sufficient light, and all blinds which entirely exclude it from your apartments, are positively injurious to health.

Dark walls absorb nearly all the light which falls on them. There is much benefit gained by light colours, as the reflection is some compensation for dark situations.

To darken a bed-chamber by shutters or blinds is an ill custom, especially in spring and summer mornings, when the cheering rays of the sun would naturally awaken you up, and conduce to habits of early activity.

Do not surround your bed with curtains, for it is injurious to health by confining the impure air, and by preventing that free circulation so needful for the due exercise of the functions of the lungs.

No foul linen ought to be kept in a sleeping room, nor in the closets of the room.

Where the bed-chamber is small, or where there are several persons sleeping in the same room, both the walls and the ceiling should be lime-washed every year: for there is a large quantity of carbonic acid gas extricated from the lungs during sleep, deteriorating the air of the room. This noxious gas, or foul air, so

much increases during the night, in close apartments, as to be scarcely bearable to a person coming from the fresh air.

Now it is the property of lime to absorb carbonic acid gas: so that when the walls have been washed with lime, or if a large vessel of limewater be kept in the room, the healthy quality of the air may be preserved during the night.

Are your pride and prejudices shocked at the idea of seeing your dormitories without the becoming decorations of paper hangings? We reply, it is the office of your medical adviser simply to consult the restoration and preservation of your health.

A very eminent writer on medical statistics<sup>1</sup> has shewn, that the density and affluence of the population being the same, the rate of mortality depends on the efficiency of ventilation, and the means which are employed to remove impurities.

It has just been stated, that our very breathing vitiates the air. The decompositions of animal and vegetable matter yield poisonous emanations in close houses, dirty streets, and where there is bad drainage. The smoke of fires and the products of combustion are poisonous. Thus gases

<sup>1</sup> Mr. Farr, of the Register Office.

and effluvia and odours which are concentrated among lofty buildings, are slow in their escape, and, unless during the prevalence of high winds, constantly deteriorate the purity of the atmosphere.

In the country, emanations are so diffused in space, that they are comparatively innoxious.

In the report of the Registrar General we find, that in the North Riding of Yorkshire and parts adjacent, out of 1000 deaths, 210 occurred at at the age of 70 years and upwards; while in Birmingham, the proportion of persons dying at that age, out of 1000, was 81; in Leeds, 79; and in Liverpool and Manchester not more than 63.2

One of the sources therefore of the higher rate of mortality in the cities, is the insalubrity of the atmosphere: and though much may be attributed to the dissipations of town life, and the too sedentary occupations of the inhabitants of cities, yet we may fairly conclude, that the greater proportion of deaths is mainly to be attributed to the impurity of the air.

It has been ascertained that the main sources of fever in the metropolis, are in the crowded

<sup>&</sup>lt;sup>2</sup> First Report of 1839.

districts of Whitechapel, Lambeth, Stepney, Wapping, Bethnal Green, and St. Giles.<sup>3</sup>

In such situations, the health of the inhabitants might be improved, and consequently human misery mitigated, and the ratio of mortality reduced, by better drainage, the intersection of the dense districts by a few spacious streets or squares, and the removal of the obstructions to the free circulation of the air.

Such improvements are needed in most cities of our empire: and not only would the poorer classes be benefited by such measures, but all classes of the community are interested in their adoption; for epidemic diseases travel from unhealthly to healthy quarters, from the centre of cities to the surrounding villages and remote dwellings.

These are important considerations, as it is chiefly the epidemic diseases which diminish the average duration of life in this country. It is against this class of diseases that efforts should be made, to mitigate and control the ravages of death.

In districts partially covered with water, and

<sup>&</sup>lt;sup>3</sup> Dr. Southwood Smith, Report on the Prevalence of Fevers in the Metropolis.

having a luxurious vegetation, such as marshes and fens, particularly in warm countries,—or in colder countries, at seasons of the year when the sun is most powerful,—noxious exhalations arise, which have received the name of malaria, and are known to be the source of various diseases, more or less of an intermittent febrile type.

In cold and temperate climates, the exhalations from marshy situations give rise to regular ague; but on approaching the Tropics, the same causes occasion the most formidable remittent and continued fevers, the well-known scourges of hot climates.

It is true that habit, and the conservative powers inherent in the human constitution, may enable us to resist, to a certain degree, the action of the deleterious qualities of the atmosphere; yet no person, however strong, will long remain uninfluenced by them.

In proof of this, compare the firmly-built frame, the florid complexion, and the elastic motions of the Highlander, with the sallow countenance and languid gait of the inhabitant of the low and humid district, as the operatives in factories.

We may see the ill effects of impure air in the countenances of the children confined in close

situations, or in manufactories,—their blood is not duly purified in its passage through the lungs; so that although they may be well fed, they are ill nourished.

#### CHANGE OF AIR.

Children ought never to be brought up in large cities; but when unavoidable, they should be sent during a part of every summer into the country. Some neglect, others have not the opportunity, and many are not aware of the importance of using this invaluable means of preserving and improving the health of their offspring, although the comparative value of pure air is evidenced in the appearance of those children brought up in large towns, when they are removed into the country even for a few weeks.

When the health of children is delicate, or when it has been rendered so by some of the diseases of childhood,—such as measles, hooping-cough, or scarlet-fever,—no means will prove so effectual in restoring the health, as a change to a dry and warm atmosphere.

The great advantages of country air to the young, the delicate, and to those who are re-

covering from attacks of disease, are not sufficiently appreciated.

In convalescence, the return of health will be greatly promoted by gentle exercise in the open air. When the patient resides in a crowded city, or other confined situation, this plan is more urgently called for.

Indeed, after many severe disorders, complete restoration to health cannot be expected without country air: and so essential is this step, that the person deprived of this measure attains only to an inferior degree of health, and it is often seen that the remainder of life is little better than a state of convalescence.

In no class of diseases is change of air so obviously called for, as in chronic disease of the lungs, hooping-cough, and other affections of the air tubes, and those complaints which appear to have originated in the pernicious qualities of the air of certain localities, as aguish disorders, and other low fevers of an intermittent character. Indeed, we may scarcely ever expect a perfect re-establishment of health, without residence for a considerable time in another situation.

But let not the change be indiscriminate: regard must be paid to the constitution of the sufferer. The feeble and irritable invalid cannot

bear the keen and piercing air, whatever his disease may be; whereas those who have naturally a robust constitution will feel increasing vigour by it, and find such an atmosphere bracing.

Those persons who require change of air, either with a view of preventing disease or removing its effects, will derive greater benefit from repeated changes, than from a long-continued residence in one situation. Travelling is one of the most powerful means of arresting the disposition to and the progress of consumption.

The sheltered parts of the interior of our own country are the most eligible residences for all classes of invalids, in the spring and in the early part of the summer: after midsummer, and in autumn, the sea side forms the best situations. But in winter let them remain wherever Providence has fixed their destination.

In diseases of the digestive organs, and such other complaints as originate from a studious or sedentary life, change of air, combined with exercise, will be found to be a powerful means of restoring the tone of the muscular and nervous system; for which no medicine, though it may be an auxiliary, can be a substitute.

The removal from a cold, humid, and va-

riable climate, to one which is warm, dry, and more equable, is productive of the most beneficial effects on a large class of invalids, when medicines have ceased to be of any avail.

The hopes inspired by the measure itself, the influence of the journey or voyage, beautiful scenery, and occupation, and often also the escape from business and other sources of care and discomfort,—all claim a part in the benefit produced.

The milder regions of this country are the various parts of the sea coast between Hastings and the Island of Portland, including the Island of Wight. The coast of Devonshire has a beneficial effect on persons suffering from pulmonary disease. Torquay particularly possesses all the mildness of atmosphere of this part of the coast, with a less degree of humidity than elsewhere.

The air on the SOUTH COASTS OF DEVONSHIRE and CORNWALL is very efficacious in soothing an irritable state of the lungs.

THE SOUTH-WEST OF FRANCE resembles the climate of the south-western shores of our own island; but the mean annual temperature is about four degrees higher than the warmest parts of England.

NICE and HYERES, says Sir James Clark, will not disappoint the hopes of the travelling invalid which have been raised high respecting the beauty of the south of France. The hills are covered with shrubs, many of which are evergreens; and the extensive orange gardens of HYERES afford evident proofs of the mildness of this climate.

Among the Mediterranean islands, Malta has been considered as the most desirable in supplying all the wants of the invalid; but Dr. Hennan has stated, that owing to the arid nature of the soil, a quantity of impalpable dust is suspended in the atmosphere whenever the weather is dry; and indeed the frequent and heavy rains during the winter render it an unsuitable residence for those who suffer from affections of the lungs.

The Azores 4 may be recommended as suitable for persons requiring a mild and equable climate, and more especially for consumptive invalids.

In steadiness of temperature, Madeira is scarcely exceeded by any part of the world; and on an average number of years, there are

<sup>&</sup>lt;sup>4</sup> See Dr. Burnett's Description of the Island of St. Michael.

only seventy-three days in which rain falls. The rain also occurs at more regular seasons, chiefly in autumn, the atmosphere being generally dry and clear for the remainder of the year. In the winter, Madeira is twelve degrees warmer than Italy or France; while the advantage of a cool land-breeze during the night, which alternating with a refreshing sea-breeze in the day, moderates the heat, and renders its summer months five degrees cooler than the last-named countries.

The effect of the heat of higher latitudes is only to oppress and exhaust the strength of persons who have not been naturalized to the climate.

The uniform high temperature of the West India islands—the almost cloudless sky, which affords no shelter from the direct rays of a tropical sun—precludes invalids from taking exercise in the open air, which is the very object for which they are sent abroad. There is no twilight to compensate for the glare and heat of the day, and the nights are too hot to admit of refreshing repose.

The concurrent testimony of all the medical authorities which I have consulted on the subject establishes the fact, that consumptive cases,

sent thither from this country, proceed much more rapidly to a fatal termination than in more temperate regions.

There are, however, other diseases and derangements of the health which are comparatively rare in the West Indies. The immense perspirations excited, and constantly maintained without intermission, produce material and very important changes in the system, and may be made a powerful means of cure in many chronic diseases.

This climate has been known to be serviceable to persons suffering from calculous disorders. It has been found of benefit to those who have been considered to have ossific deposits in the arterial system, and it has been known to check the progress of aneurism; and the powerful effect of high temperature on the various secretions is said to alleviate, and in many cases to cure diseases of the heart.

Persons who have nearly lost the use of their hands and feet from gout, after a residence of two or three years in a tropical climate, have returned perfectly restored, and have continued so.

Scrofula is a very rare disease in the West India islands; and there are numerous cases of scrofula in this country which, I have no doubt, would be greatly benefited, if not cured, by a temporary residence in that climate.

The diseased condition of the lining of the air tubes—that is of the larynx, trachea, and bronchi—are generally produced and influenced by cold and moisture: removal, therefore, to an uniform warm atmosphere seldom fails to relieve the attendant cough and expectoration.

In England, Torquay, Undercliff, Clifton, Hastings, and Brighton, are the most favourable residences for such as suffer from chronic cough.

A judicious and timely change of air, combined with a considerable extent of travelling through a country and scenery which excites a lively interest, produces the best effects on the health of persons whose minds have been excited and over-strained by long-continued application to business or study.

#### CLOTHING.

Well defend the body by clothing, especially if you are an invalid. The coarser the material, the better; for it is the more calculated to pre-

serve the temperature of the body, and it should be regulated according to the vicissitudes of the weather.

On an average, there are two pints of perspiration, in the form of vapour, escaping from the surface of the body and lungs in the course of the day.

Many diseases may be attributed to checked perspiration; so that clothes should be warm enough to entirely defend the body from cold. It is said by the celebrated Boerhaave, that "only fools and beggars suffer from cold;" the latter not being able to procure them, the former not having sense to wear them.

Do not leave off your winter clothes till late in the spring, and put them on early in the autumn.

Winter garments not adopted soon enough, or left off too soon, have often occasioned serious disease of the lungs or bowels, or have exasperated constitutional complaints.

During the winter season, the cold is fatal to many of the infirm and aged, as the tables of mortality in the winter months sufficiently prove.

After the age of forty, it is therefore better to exceed rather than be deficient in clothing.

There is not a greater charity to the poor, than

at the approach of the cold weather, to give them flannel garments.

Calico is preferable to linen, both for personal covering and for beds; and its texture should be thicker for winter use than for summer.

Very light cottons or muslins, and superfine woollens, are but the seducing vanities of fashion borrowed from a warm climate, and are ill suited to the vicissitudes of our own atmosphere.

Much stress is generally laid on keeping the feet warm, but really this is a matter of minor importance; it is of much greater consequence to maintain the vital heat in the chest and bowels; for if the body is well defended, the extremities will not suffer from cold.

To wear tight stays for the support of the back is a mistaken notion: instead of giving strength, it produces real weakness, by compressing and thus preventing the action and development of the muscles; and if the waist be reduced by such a proceeding, suffering and ill health will follow.

Few persons have perfect feet, which is entirely owing to the custom in early life of wearing shoes too small for them.

The direct effect of cold and damp inhaled by

the lungs, is less injurious to the health than the revulsion arising from chills and the checked exhalations from the surface of the body. The maintenance of a perspirable warmth is essential to health.

It is not, as generally supposed, the breathing of cold air which is injurious; for one cold caught by inhaling of cold air, a hundred are the effects of cold and moisture on the surface of the body.

Let your clothing be proportionably warm as the atmosphere is cold, and you will endure the lowest temperature without unpleasant feelings or injury to your health.

The number of maladies which proceed from atmospheric vicissitudes, and impressions on the surface of the body, which are termed "taking cold," may be counteracted by early and habitual exposure to change of temperature.

It is therefore unwise to bring up your children delicately—they should rather be accustomed to cold and heat. After the age of twelve months, you should gradually use them to hardiness, or rather allow them to expose themselves to the rain and the cold, as it will be the means of seasoning the constitution, and a preventive of future suffering from changes of weather or climate.

The agency of cold and moisture on the surface is also rendered harmless by sponging the body every morning with cold water: the practice is easy and pleasant; it would prevent an immense amount of suffering, and it may be safely adopted at any period of life.

It is of the greatest consequence that invalids should maintain an active state of the circulation at the surface of the body and the limbs; and this increased determination to the extreme vessels is one of the effects of a warm climate. Those who cannot avail themselves of the advantage of a change, may, in some degree, as a compensation wear warmer clothing.

## DIET IN GENERAL.

THE stomach of man holds a place intermediate between that of those animals which in a state of nature feed wholly on vegetables, and those which exclusively subsist on flesh.

In living partly on vegetable and partly on animal substances, we are acting in obedience to the dictates of nature. Nevertheless the stomach has a wonderful power of accommodating itself to circumstances. Man can live exclusively on

either animal or vegetable food: some tribes subsist entirely on animal food, others entirely on vegetable produce.

Meat does not communicate more strength of body than vegetables. The fine and robust peasantry of Scotland and Ireland live almost exclusively on vegetable diet: so do the inhabitants of tropical climates; as, for instance, the Brahmins of India. The inhabitants of the Canary Islands subsist entirely on roots, fruit, or grain; while those of the Northern Regions use little besides animal food, and are a weak and puny race of beings.

In many publications on dietetics, more nicety in the choice of food is expressed than necessary: the greater part of mankind neither feel nor perceive the effect of those differences of diet. General rules are too often founded on peculiarities, or individual cases.

Human beings possess organic powers well suited to subsist on every kind of aliment. But still, men are differently constituted with respect to their powers of digestion, nor less differently as it regards the irritability of their systems, and are consequently variously affected with the same aliment. For this reason, particular directions will be given as to the properties of

different articles of nutrition, and their suitability to the different ages, modes of life, and particular infirmities.

In general, the stomach, if it has not been corrupted by too great indulgence, indicates with great accuracy the quantity and quality of the supply required for the state of the body: and happy is he whose wishes and appetite are accommodated to the health and vigour of the stomach.

We ought, therefore, to learn from experience, not to convert our refreshments into burdens, nor our food into poisons.

So long as the health is good, and the body and mind active, that food may be allowed which the natural appetite calls for; and generally a mixed diet of animal and vegetable food will be found best.

Vegetable diet should predominate. Too much animal food supplies blood in excess, and disposes to fever and inflammation; and a large portion of diseases are of this character.

In our climate, a diet of animal food, exclusively, cannot be safely employed: the springs of life are urged on too fast, and disease would be the necessary consequence. Since the cultivation of so many delicious vegetables in this

country, the ravages of scurvy have been very little known.

Persons of sedentary habits are oppressed, and ultimately become diseased, from the excess of nutriment which a full animal diet will occasion. Such a condition is best corrected by a proportionate quantity of vegetables.

Adults and elderly persons require but a small portion of aliment, unless the nutritive movements are accelerated by robust exercise or hard labour. But in youth, the excess of nutriment is consumed in the development of the body.

The quantity of food we require for our sustenance cannot be exactly specified; in general, it must be in proportion to the extent of bodily exertion.

If you inquire how you are to know the quantity of food you ought to take, I reply, while hunger continues, and you can eat and drink plain fare with a relish, your system is strengthened; but by indulgence in highly flavoured food, you are induced to partake of more than is sufficient to allay the sense of hunger: and this pampering of the appetite will inevitably produce dyspepsia, or some other disease.

For what are the spices, and sauces, and gravies of the cook, but so many provocatives to

induce those to eat, who have already eaten enough? To provoke those to drink, who are not athirst,—and those to eat, who are not hungry?

But it may be said, that were it not for these provocatives, persons with delicate stomachs would not be able to eat at all. I answer; If you cannot eat, it is because you have no appetite; and you must use those means for procuring an appetite which are elsewhere referred to in this book.

It is a mischievous fallacy, to suppose that the more you eat, the stronger you grow. On the contrary, when the system is feeble, and as age advances, the proper way to improve the health is to diminish the usual amount of daily food.

Except among the poor and the labouring classes, true hunger is but little known; and persons too frequently eat on account of the stimulus which highly flavoured dinners afford them.

Persons who undergo but little bodily fatigue, require a correspondent small quantity of food: for if they eat too often, or too much, they will inevitably become miserable dyspeptics.

It is a vulgar error to suppose that the more

plentifully you eat and drink, the better you will thrive, and the stronger you will grow.

It is not the quantity we swallow, but that which is well digested which nourishes us.

A moderate meal, well digested, renders the spirits buoyant and the body vigorous; but superfluity oppresses the system, and debility, discontent, and melancholy watchfulness or trouble-some dreams, are the consequence.

Our appetite and our experience ought to inform us what food sits easiest on the stomach; and, by a kind of instinct, speaks more plainly, (when the stomach is in a delicate state,) and in a well informed person is a surer guide than any dietetic rules that can be given.

It is absurd to affirm that any thing is wholesome or unwholesome, without considering all the circumstances to which it bears a relation, and that which the age and state of the constitution requires. Even in the same person, the disposition and powers of the stomach will vary at different times.

That which satisfies our hunger, and refreshes us, and causes no uneasiness afterwards, may safely be taken-in moderation whenever the appetite is keen, whether it be at dinner or supper. What is appetite, but a sensation warning us that the body has suffered waste, and calling upon us to repair it? Appetite, therefore, in the nature and order of things, ought to precede the act of eating.

Nature has given to man a discerning relish for her bounties; of which there is an ample supply for his gratification; but though nature has given an appetite, and supplied the most ample means for its indulgence, yet there are fixed limits, beyond which that indulgence is incompatible with the well being of the system. And we are blessed with reason sufficient to convince us of our errors in this respect, and with will to restrain our desires.

No exclusive rule can be laid down, as to the quantity of animal or vegetable food necessary. It has been stated, that a mixed diet of animal and vegetable food is that which nature has designed, and experience proves to be best, for persons living in temperate climates.

It is the property of animal food to raise the temperature of the body and to quicken the pulse much more than vegetables; hence, in the winter season a larger portion of meat may be eaten than in summer.

When the body is at a high temperature—

when the season is warm—when there is inflammatory tenderness of the chest or abdomen when there is headache and fulness of the head, threatening apoplexy, the person should be restricted exclusively to a vegetable diet.

Bear it in mind, that a mixed diet of animal and vegetable food is best suited to the organization of those who inhabit a temperate climate. The quantity and proportion of each which is necessary for supporting perfect health, must ever vary in individuals, being altogether dependent on age, temperament, habits of life, state of the health, climate, season of the year, and other incidental circumstances.

# DIET SUITED TO THE AGE.

MILK is the best sustenance for infants, for the first nine months; indeed, until nature furnishes teeth for solid food, nothing else should be given to them.

If the mother is unable to suckle her child, a wet-nurse is the best substitute. If this be not attainable, it is consolatory to reflect, that infants may (with care) be reared, without prejudice to their health.

The natural mode of taking food should, as much as possible, be imitated, and the child's nourishment should be taken by suction from a bottle.

For the first four months, two thirds of new milk and one of water, with a little sugar, approaches, in taste and quality, as nearly as possible, to the mother's milk, and is sufficiently nutritious. Afterwards, bread boiled in water, and mixed with new milk, forms an agreeable diet for the child, until it has teeth to masticate more solid food. Most infantile diseases arise from errors in diet.

During childhood and youth, up to manhood, the growth of the body demands an abundant supply of plain nutritious aliment. It is at these early periods of life, that simplicity in kind, and regularity in meals, would establish the foundation of order and punctuality in other things, and thus conduce to health and happiness through life.

The constitutions and temperaments of individuals are widely different; so that while one can subsist and enjoy good health on vegetables, another requires a proportion of animal food to keep up his strength and spirits. These differences depend chiefly or entirely on the previous habits.

Thus persons of sedentary habits are oppressed, and ultimately become diseased, from the too highly stimulant property of a full diet of animal food.

Dr. Beaumont controverts the accuracy of the usually established principle, that animal is more easily assimilated than vegetable matters. It appears, indeed, from several experiments, in which vegetable and animal aliments were introduced into the stomach, (and there subjected to the action of the gastric fluid,) that the vegetable articles were more completely and more speedily dissolved than the animal aliments.

In the tables of the comparative digestibility of food, in the work just referred to, it appears that such things as sweet apples, pickled cabbage, and some other vegetables, were digested in two hours; whereas roasted or fried beef, broiled salmon, and boiled veal, occupied four hours in the same process.

It appears further, that boiled tripe and boiled rice are articles very rapidly digested, each of them being dissolved in the course of an hour.

Heavy and light food, therefore, are very vague expressions, unless we mean by it a more or less degree of digestibility; and this entirely depends on the powers of the constitution, and the activity of the digestive organs.

A highly concentrated diet, or food which does not contain a mixture of innutritive parts, is always injurious: for a certain volume or bulk seems a necessary condition of wholesome food; and the capacity of the digestive organs sufficiently shews, that nature never intended them for the reception of highly nutritious food unmixed.

Thus, to take butter, cream, soup, and rich sauces, without a large admixture of bread, potatoes, or other less concentrated aliment, will invariably be attended with disordered digestion.

Do not confound nutritive with digestible substances. Food may be highly nutritive, and yet be digested with difficulty. This is the case with oily and fatty aliments: therefore they should be taken sparingly, and with the addition of a quantity of bread or other vegetables, especially when the stomach is delicate.

## PARTICULAR ARTICLES OF FOOD.

#### BREAD.

WITH respect to vegetable diet, Bread is the most important, as containing the largest quan-

tity of the elements of nutrition. But in addition to its nutritive qualities, it has the mechanical property of dividing the food, so as to give suitable bulk and consistence to it. Therefore the quantity taken with meat should be in proportion to the nutritive qualities of the meat.

The concentrated cookery of the French is rendered more wholesome by the large quantity of bread which that people use at their meals.

Although many persons eat new bread without having the stomach in the least incommoded by it, still the best writers on dietetics have, with good reason, recommended stale bread, as far better for digestion.

That bread is not the best which is the whitest: commoner qualities, which contain small particles of bran, will pass more readily into a state of division and solution; and they have a beneficial effect on persons of costive habits.

### PASTRY.

Experience, appetite, and your own sensations must dictate whether puddings or pastry, or both, and of what kind, best suits the stomach. Some persons have entertained a powerful prejudice against their use: and certainly in many

cases where the stomach is weak, or the person advanced in years, baked pastry may be objectionable; but in general, puddings are highly nutritive, and not heating to the system. Rich pastry must be taken more sparingly.

#### RICE.

RICE is a mild and cooling aliment, admirably adapted to the inhabitants of warm climates where it is produced, and we find it an agreeable species of food in this country; but its agreement with the stomach entirely depends on our age and appetite, and the mode in which it comes to our table. It is however rare that it disagrees with any one.

### OTHER FARINACEOUS SUBSTANCES.

Various other articles of farinaceous diet in domestic use, such as Tapioca, Sago, Arrow-root, Millet, Macaroni, &c., owe their nutritious qualities to the starch or farina which they contain. From the soft and mucilaginous form in which they are prepared, they are well suited to invalids, especially when the stomach rejects more substantial food.

Peas and Beans, when green and young, are easy of digestion, and rather increase the ap-

petite for animal food. Dry peas, when well cooked, are equally wholesome, but are to be taken more sparingly. The kidney-bean also, when well boiled, is very easy of digestion.

Potatoes in this country, as well as in our sister isle, hold a rank as an article of diet not at all inferior to bread. A good potato is light, nutritious, bland, and easy of digestion: it may be eaten by any one at any time, or under any circumstances. If there are exceptions to these precepts, they are rare; for by nice cookery this article may be adapted to the most fastidious and delicate stomach.

#### ESCULENT ROOTS.

Esculent roots, such as Turnips, Carrots, Parsnips, and Jerusalem Artichokes, are nutritive and agreeable, and may be freely eaten; for they qualify our animal food, by counteracting its heating properties, making it sit easy on the stomach. You may eat more meat with impunity, if you will take a large portion of some of these vegetables with it. There is, however, a prejudice existing against the carrot, as a root which is indigestible; but let it be well boiled, and it will disagree with no one.

The Cauliflower, Brocoli, Young Cabbage,

and Asparagus may be taken with the same view as the esculent roots: since their introduction into this country, many diseases have disappeared. In general, persons take too little of these cooling and wholesome vegetables.

Salads, during the heat of summer, are exceedingly refreshing, and well calculated to relieve or prevent that febrile state of the body which full meals of animal food are known to occasion.

Cucumbers are considered by some persons very unwholesome; if so, the great expense incurred in the raising of this delicious vegetable might be spared. There are few, however, who find any inconvenience from eating them; and where they are known to disagree with the stomach, such persons should refrain from them. Cucumbers are improper only for those who are advanced in years; the diminished powers of their stomachs will not digest salads, particularly radishes and cucumbers.

The Onion, as a stimulant to the stomach and bowels, is valuable, and it possesses diuretic properties, which may be useful in many cases. When boiled, it is found to contain sweet mucilaginous nourishment.

The LEEK, GARLIC, and SHALOT are of the

same class, and possess qualities of the same nature.

Watercress, after the earlier periods of life, is beneficial in promoting digestion, and it has not the same tendency to produce flatulency as some other raw vegetables.

FRUITS are, in this country, articles of luxury rather than food. Elderly persons must partake of them very sparingly; but they are grateful and wholesome for the young. Fruits contribute much to the preservation of health, and appear to be providentially sent at a season of the year when the body requires a cooling and antiseptic aliment, which they are so well calculated to afford.

The APPLE and ORANGE, when ripe, will be found to agree with the dyspeptic, and the weakest stomach.

The Strawberry, Raspberry, Grape, and Currant are cooling and antiseptic.

Other fruits, such as Cherries, Plums, Apricots, Peaches, Nectarines, Pines, and Melons, ought to be cultivated more extensively, as they tend much to prevent inflammatory diseases, and may be taken without restraint, until the age of forty or fifty: after these periods, fruits of all kinds should be eaten in smaller quantities.

#### ANIMAL FOOD.

MILK furnishes both a fluid and solid aliment, and affords a ready supply of nourishment to the system, while it does not excite that degree of feverish action which is produced by other animal matters.

Asses' Milk bears a greater resemblance to human milk than any other: it contains more sugar than that of the cow.

CHEESE is a highly concentrated nourishment, and is well adapted to youth, to strong stomachs, and those who use great and constant exercise.

BUTTER disagrees with delicate stomachs; but it is highly nutritive, and not so objectionable to invalids as is generally supposed.

Jellies, Soups, and other gelatinous matters, which contain the elements of nutrition in the highest degree of concentration, should rarely be given to invalids, for they oppress the powers of the stomach, and, where it already exists, will keep up feverish excitement.

Fish is a less stimulating nutriment than flesh, and, during the digestion, produces less heat in invalids; hence fish affords a most valuable diet for persons recovering from fever, or inflammatory diseases. It is a restorative of the animal powers, without being exciting.

Turbot, Cod, Whiting, Haddock, Flounder, and Sole, and the several species of fresh-water fish, constitute a mild and nutritious diet; they are easy of digestion, and are consequently well adapted for weak stomachs.

Salmon may be considered to constitute a more substantial diet, and approaches, in its nutritive qualities, to lamb or mutton; it is objectionable under any feverish state of the system.

Shell-fish, Lobsters, and Crabs, are no doubt very nutritive, but they are much less digestible than any of the fish above named.

Fish, as a nutritive article of diet, holds a middle rank between vegetable and animal food.

FowLs and other birds form the next class of substances containing mild animal nutriment. The white meat of domesticated fowls furnishes less blood, and is consequently less stimulating than the flesh of wild birds, but it is not more digestible.

The flesh of quadrupeds, such as MUTTON, LAMB, VEAL, BEEF, PORK, BACON, and VENISON, are all very highly nutritious, and will never disagree with persons in moderate health, if taken at proper times, and in quantity according to the degree of exertion of the individual.

The following are placed according to their nutritious qualities: Fat Bacon, Beef, Venison, Mutton, Pork, Ham, Lamb, Veal, Hare, Rabbit, Fowls.

Wild birds are more easily digested than domestic fowls. The same observation may be

applied to the flesh of quadrupeds.

The dark-coloured flesh of animals, particularly venison and game, is easily disposed of by the stomach, and consequently a person may eat more heartily of it than of white meats, without the feeling of discomfort or satiety. The former, therefore, are more easily digested.

It would, however, as observed in another part, be erroneous to assert that any one of those meats is more wholesome than another. Let it still be borne in mind, that the wholesomeness of any article of diet must depend on the quantity taken; and the age, the state of the constitution, and the habits of the person who is to partake of it.

The more tender your meat, the more you may eat, for it is more easily digested.

It has been, and with great truth, calculated, that one ounce of the fat of meat affords nutriment equal to four ounces of lean; it is therefore an important matter of economy for the poor to buy fat meat.

Eggs are the most nutritious species of animal food that can be eaten; and those who can take them for breakfast, without any feeling of inconvenience, have strong digestive powers.

## DRINKING.

WE can endure the sensation of hunger with more composure than thirst, and we could survive longer under the privation of solid food than of liquid aliment. We must have a supply of drinks to replace the fluids which are constantly escaping from the body during the exercise of its numerous functions. For this purpose, what fluids are the best?

To those who require drink, water is delicious:—for those who do not require drink, water has no relish. If, therefore, we only took fluids when we were really thirsty, pure water would be most delicious.

Thirst indicates to us when we should drink; disrelish, when we have taken enough.

Do not cherish prejudices against water. Water constitutes an important article in all our sustenance. If a chemist were to examine our bread or meat or vegetable diet, he would find it to contain four-fifths of water.

He has the best health who considers water the best drink, and salt the best sauce.

The physician seldom finds that his patient has regulated his life by this maxim; but he is called on to rectify stomachs vitiated by had habits, and which cannot be restored without a strict discipline.

Unquestionably, water would be the best beverage at all times, if man had not forsaken the simple path of nature.

If the more simple fluid does not agree with the stomach, you will find toast-and-water a most agreeable beverage.

The water employed for its preparation should be of a boiling temperature, and it will extract a certain quantity of glutinous matter from the bread, which will render the toast-water quite as nutritious as beer.

Barley-water, with the addition of lemonjuice and sugar, affords a greater quantity of support than any fermented liquor.

If, however, these preparations are too viscid and cloying to the invalid, the infusion of sage, balm, mint, or rosemary will be found a very agreeable drink, and more especially proper when there is any degree of feverish excitement.

Tea, in individual cases, occasions feelings of depression or various nervous sensations, accompanied with loss of sleep, and derangement of the digestive organs. But these cases form only exceptions, from which no general rule can be deduced.

Tea possesses the same power of exhilarating the spirits, without having the intoxicating quality of wine.

Coffee accelerates the operations of the stomach; and a cup taken after dinner will enable the dyspeptic to digest this meal with comfort.

Although coffee, like tea, does in certain individuals produce wakefulness, by giving activity to the mind, yet generally as a beverage it may be taken at any time of the day. The potations of spirituous liquors, or their compounds, as refreshers or exhilarators, are not to be compared with the cheering and invigorating effects of coffee.

Strong tea or coffee should never be given to children. Green tea is a powerful stimulant, and can never be taken without injurious consequences. Black tea is much safer: mixed

with green it has no bad effects upon persons of mature age.

CHOCOLATE and COCOA contain a larger quantity of nutritive matter, and may therefore be regarded as both food and drink: the latter is certainly least nutritive; but, as it contains less oil, it is preferable for invalids, or persons with weak stomachs.

Soda-water, Ginger-beer, and such sorts of beverage, are mere enticements to intemperate persons, who do not know that the only virtues they possess is in the simple diluting quality of the water itself. The carbonic acid they contain, by inflating the stomach, has only a mischievous quality.

### WINE.

The virtues of Wine are very much overrated, particularly by the poor; and under disease, it only adds fuel to fire. There are others who use wine and spirits as a medicine, but they would have less disease by omitting the supposed remedy.

The water drinker enjoys an exquisite sensibility of palate, and a relish for plain food, that a wine drinker has no idea of.

The best writers on diet and regimen agree,

that no man needs wine till he arrives at the age of forty. He may then begin with two glasses a-day: at fifty, he may add two more; and this quantity he ought never to exceed.

Happy is he who preserves his wine as a cordial in reserve, and only takes it to support his mind and heart under anxiety and fatigue.

The light wines of France, of the Rhine, and the Moselle, are less likely than any others to influence injuriously the nervous system: they are less intoxicating, and possess diuretic properties; and although acidulous, yet they do not disorder the stomach so readily as the stronger wines.

The stronger wines, as Port, Sherry, Madeira, and the aromatic spirituous wines of Burgundy, are the least wholesome, owing chiefly to the uncombined brandy which is mixed with them for the purpose of securing their importation, and increasing their intoxicating qualities. Professor A. T. Thompson says, all these wines contain volatile oil, which has an injurious effect on the nervous system, and induces a tendency to apoplexy.

Medical compliance with the vulgar error of giving porter or wine to mothers when suckling

their offspring, as well as the more injurious custom of giving infants bread and water sweetened with sugar, spices, and spirits, arises from a want of due consideration of their effects.

There are abundance of cases on record, and daily experience proves, that the greatest and most continued efforts, both of body and mind, may be sustained without strong drink.

By indulging a fondness for wine and strong liquors, many persons whose talents had gained them deserved reputation and respect, and who might have insured themselves an ample income, have ruined their abilities, lost their acquirements, and sunk into beggary, the blots instead of the ornaments of society.

#### SPIRITS.

It is generally supposed that ARDENT SPIRITS promote the warmth of the body: on this account they are taken by persons exposed to cold. This is a very fallacious and bad practice: a transient glow is produced, but afterward the system becomes more cold and languid.

Indulgence in the use of spirituous liquors seriously affects the powers of life: producing disease of the stomach, induration or abscess of

the liver, delirium tremens, palsy, dropsy, epilepsy, mental derangement, and a long train of constitutional disorders, which prematurely subdue the strongest constitutions.

It is a hackneyed and silly remark, that some drunkards have lived to good old age: this is an exception to a general rule. "Let me observe," says an acute writer and excellent practitioner, "that these cases are extremely rare, and may be looked on as very remarkable occurrences; indeed, an instance of this kind is never allowed to escape observation; because man is ever eager to catch at any thing which may offer an excuse for indulging in those habits to which his inclination urges him. Every such instance is therefore carefully registered; while the thousands who daily drop like rotten sheep into premature graves, the victims of intemperance, are neither marked or minded. 'He died,' say they, 'of this, or that, or the other disease;'-never stopping to inquire how that disease was incurred."

Experiments have been lately made which demonstrate, in a most conclusive manner, the noxious effects of ardent spirits on the human stomach. And if it were possible to present to ocular inspection the lining membrane of the stomach of the spirit drinker, after two or three days' uninterrupted drinking,—dry, red, bloodshot, or actually bleeding,—it would do much to put a stop to this wicked practice.

Physicians, indeed, have been long conversant with the wide spreading ravages of ardent spirits. Judges and jurors have seen it; for they observe that intemperance is the mother of crime. Enlightened ministers of the gospel have seen it; for they perceive that alcohol hardens the heart, sears the conscience, turns men away from all the blessed effects of religion, and forms a plague-spot in the community.

Until the institution of temperance societies, the use of distilled spirits had become a national evil. These societies have much benefited the people by informing them of the unmixed evils occasioned by drinking ardent spirits.

With the great mass of the community, however, a reform was for a long time considered neither needful nor practicable: but the times are now changed, and there are few thinking individuals who do not acknowledge the full importance of temperance, and of the total abandonment of distilled spirits.

All medical authors, in every age, have written in praise of temperance; and there is no sensible person who does not know, that to recover lost health he is obliged to abstain from every intoxicating drink. "The fact is, people like it, and will have it, right or wrong; and they call for their brandy-and-water as though they were doing the most sensible thing in the world."

#### FERMENTED LIQUORS.

The nutritive and strengthening qualities of strong beer are very much overrated, and a fallacious pretext thence deduced for the excessive and injurious consumption of it.

Strong drink of all kinds robs a man of his strength, therefore limit yourself to the smallest quantity capable of counteracting the feeling of exhaustion and languor.

Drink only four ounces, that is, a quarter of a pint, of strong beer at any time, and that not oftener than twice a day.

Shun most scrupulously all those occasions on which you may be tempted to take wine or strong beer as a means of consuming time, or of producing what is termed conviviality.

## DIGESTION AND INDIGESTION.

The stomach is the main-spring of health; and unless it be in a perfect state of adjustment, the machinery of life will vibrate with an irregularity or languor.

There are few persons in the upper or middle classes of life wholly and perfectly free from diseases dependent on disordered digestion; occasioning either an irregular fulness of the bloodvessels, a depressed circulation, or a heightened sensibility; all which are brought on by the refinements of the age in which we live.

Dyspeptic and nervous diseases, and other equivocal maladies, are the inevitable consequence of a disordered state of the stomach, produced either by unnatural modes of life, indolent habits, intemperance, or vexatious occurrences.

Indigestion in advanced life is generally occasioned by that love of ease, which induces persons to diminish the degree of activity, without in a corresponding degree diminishing the quantity of food.

As the activity of our existence decreases, so must the quantity of our food be diminished, or

indigestion, and a multitude of disorders of which this is a fruitful parent, will soon destroy us.

We are not naturally disposed to apoplexy, erysipelas, carbuncle, or inflammations—the general cause is indulgence, or mismanagement of the health.

Indigestion and error of the stomach are distinguished by an almost numberless train of distressing symptoms; and so unhappy, nay, perfectly wretched, do these complaints render their victims, that they eagerly seize upon any means that afford the most distant prospect of relief. But woe to those who fall into the hands of a quack.

The machinery of the human system is so perfect, and its moving powers are adapted with such admirable skill, that it can perform all its necessary labours, and resist the ordinary vicissitudes and morbid influences to which it is exposed, without inconvenience or permanent injury; and it is only when the organs of the body are overtasked, that the vital energies are exhausted, and disease introduced.

Anxiety of mind disturbs digestion much more than fatigue of body; and indigestion then becomes the chief cause of disturbed sleep.

He who makes an idol of his stomach will be

punished with the sufferings of indigestion, disturbed sleep, and the night mare.

Franklin, by way of experiment, lived on bread and water for a fortnight; and at the end of that time found himself stout and hearty. Delicacies, therefore, are sought after to please the sensual appetite, and are quite unnecessary for health and strength.

Many persons are accustomed to indulge in too great quantities of food; and in order to enable their stomachs to digest it, they take the addition of wine or spirits, or some equally stimulating substances: these gradually exhaust the tone of the organ, and produce a state of weakness and languor, which must sooner or later terminate in serious disease.

Be content with one or at most two dishes at a meal, and in the choice of these consult your palate.

The abundance of strengthening and nourishing things will only hasten a person to his grave.

Beware, then, of a variety of wines, liquors, ices, desserts, champagne, custards, and trifles, they not only serve to tickle the palate, but they overcome the powers of the stomach, half paralyse digestion, and bring on discomfort for several days.

Strong persons may take a strong diet; but let not the weak attempt to follow their example, for instead of feeling invigorated with it, their stomachs will be oppressed.

The less of stimulants you can do with the better, unless to excite appetite when it is debilitated by indisposition, or enfeebled by old age.

As a restorative, well seasoned soup, or a ragoût, may be taken, with less injury to the machinery of life than is caused by the use of wine or spirituous stimuli, which merely quicken the circulation, without contributing any thing material to feed the lamp of life; which if it be originally defective, or impaired by time or disease, will not burn brightly unless it be supplied with the best oil, and trimmed in the most skilful manner.

As a general rule, take but a small quantity of spiceries, such as cayenne, &c. for highly seasoned food does mischief by so blunting the nerves of taste, that they become insensible to useful and nourishing food.

Salt is the most salubrious seasoning which nature has given us for sapidity and relish to other substances: it is highly conducive to the healthy state of the blood; and it has this advantage over other substances, that if taken in excess it carries its remedy with it in its aperient quality.

Those whose digestive powers are feeble, should never take any thing which is cold. In a weak stomach, cold food frequently occasions uneasiness, flatulence, palpitation, and other troublesome consequences of indigestion. The immediate remedy for these, is to drink a glass of hot water, and to adopt a recumbent position.

Weak persons, and those advanced in life, will find their digestion much benefited by lying down for an hour after dinner.

If the appetite be languid, take additional exercise in the open air, or dine an hour later than usual.

To abstain from food for a longer time than usual is one of the best methods of obtaining an appetite. If yesterday's indulgence has been the occasion of the loss of appetite, the powers of the stomach may be recovered by dining on a bread pudding, or by taking tea only.

When there is fever, little or no gastric fluid is secreted, the stomach is deranged, and digestion is suspended. The propriety therefore of abstaining from all kinds of food in febrile complaints becomes manifest and urgent, and nothing but fluids should be taken.

When there is oppression of the digestive

organs, you may take, if in years, a dose of rhubarb; or if young, or at the middle period of life, a quarter of an ounce of Cheltenham or Epsom salts in a tumbler of hot water, as a restorative.

Slight excesses at table are succeeded by a depression and stupor of mind, which in too many instances becomes habitual, and the mind is gradually more and more weakened, until great efforts are out of the question. It is well, if temperate habits come in to rescue the victim of dietetic excess from premature physical and intellectual imbecility.

Impose then upon the organs of digestion that amount only of labour which is necessary to give the human system, bodily and mental, the most perfect health and energy: on the one hand, this does not require self-mortification; on the other, it does not allow of oppressing the digestive powers for the sake of indulging the palate; for when the digestive organs are overtasked, the vital energies are exhausted, and disease introduced.

Although it must not be supposed that even the strictest temperance in diet can infallibly secure a person from the ill effects arising from undue exposure in a variable climate, unhealthy occupations, or excess either in scientific pursuits or sensual gratifications; yet even here it may prove an auxiliary to longevity, by bringing back to the invalid health and happiness.

Incalculable are the mischiefs which have arisen from daily indulgence in what are termed the comforts of life, but which, in reality, are most unnatural and pernicious luxuries.

Active exertion is the best mode of getting a good appetite; and a good appetite gives the best relish to the plainest food.

The poor and sober labourer is never incommoded by symptoms of indigestion: "his sleep is sweet, whether he eats little or much;" and though he subsists on the coarsest food, his strength is supported by it, and he is in sounder health than the rich man who fares sumptuously every day.

No instructions on the subject of diet and regimen can be universally applicable. Your age, your previous habits, and the state of your health, must regulate both the species of aliment and its quantity: sufficient, however, has been said to guard any reflecting person against error or excess in diet. Do not prejudice your health, or endanger your life, by indulging your appetite; and a century of advice is summed up in the apostolic maxim, "Let your moderation be known to all men."

### EXERCISE AND EMPLOYMENT.

Infants for the first three months sleep so much that they require no exercise, save that of being carried about in their nurses' arms. After that time, it is advisable to suffer them to exercise their limbs freely on a bed, sofa, or carpet,—and there allow them to roll about and kick at their pleasure.

Children of both sexes should be allowed to use their limbs freely in the open air, and in innocent amusement. Exercise in the early years of life is certainly followed by freedom from disease in the advanced periods of existence. Habitual indulgence in pleasure and sloth pays, in the sequel, the penalty of bodily and mental suffering.

It is a great error to restrain the free movements of the body; the limbs, formed for activity, require free exercise for the development of their structure and for the preservation of health.

It has been thought that great injury is often produced in the youthful frame by a premature exertion of the intellectual faculties. This is only true, when application to books prevents that sufficient share of playful exercise which is essential to growth and health.

The physical powers of children should be exercised without control.

Deficiency of exercise in the open air is the parent of half the disorders of females. The pallid complexion, the languid movements, and the disordered functions, and even consumption itself, attest the truth of this assertion.

Robust exertion and simple food develop the bodily powers, and go very far towards annihilating the tendency to all kinds of disease.

Boys take the best exercise in the unrestrained indulgence of their youthful sports. By means of these, every muscle of the frame comes in for its share of action; and growth, vigour, and health are the result.

It would be happy for girls if more latitude were allowed them: they are too much restricted from the free muscular exercise which health requires. The foolish and fatal plea of indecorum is urged against robust employment and activity in the open air: thus their delicate and shadowy forms are continually exciting our sympathy, and their constitutions are suffering from ill-judged restraint.

The young should have occupations in which

exercise, amusement, and interest may be happily combined. Be assured that it is a policy both narrow and short-sighted, which does not permit them daily some hours for the development of their physical powers, and the preservation of their health.

The attention should not be wearied by long and intense application. There ought to be variety in study, that the different faculties being exercised may relieve each other. There should be frequent relaxation from study and close attention to business, or the fatigued and exhausted state of mind will have the effect of deranging the functions of the stomach, and a multitude of evils dependent on it will be the result.

It was the observation of a learned physician, that "indigestion follows learning as our shadow follows our body." Not, however, because persons can study too intensely, but because they pay no attention to the physical condition of the constitution.

Inactivity or neglect of exercise produces depression of mind and tendency to disease: active employment has the opposite tendency, for the united performance of the bodily and the mental functions constitutes health. Idleness softens the body and weakens the mind.

Those who are not actively employed, or who do not take a sufficient quantity of vigorous exercise, will soon suffer from want of appetite, want of sleep, flatulency, or some or all of the diversified symptoms of nervous complaints. But exercise is a continual medicine.

Even the greatest degree of temperance is not an effectual remedy against the evils of a sedentary life, which can only be counteracted by sufficient air and exercise.

If you would have the full benefit of exercise, you should combine some mental amusement with fresh air and motion.

Hence the sportsman will rise with the sun, and in his pursuit of game or in fishing will undergo the most laborious toil without fatigue, and with benefit to his health. But were the same person compelled to exert himself half as much in that which afforded him no mental excitement, no interest, no amusement, his fatigue would be unsupportable.

The exercise of the invalid should proceed to the borders of fatigue, but never pass them. Perhaps this caution is unnecessary, since the pain produced by fatigue will always operate as a sufficient guard, nay, even an irresistible restraint.

Although salutary exercise may be taken indoors, the effects are never so exhilarating as exercise in the open air.

Walking is, at all ages and stages of life, the best possible exercise; and our climate has more days in the year for the convenience of that exercise than any other in the world.

The more luxuriously persons live, the more exercise they require to keep them in health.

We naturally have a love of ease and indolence: it is a moral disease affecting rich and poor; and multitudes of the latter are suffering from want and destitution in consequence of mere idleness. To teach the poor habits of steady and persevering industry, strict economy, and constant temperance in all things, would do more to counteract pauperism, with all its attendant miseries of want and sickness, than any contributions of the wealthy.

Those who suffer from indigestion should by no means indulge in sedentary habits: they should rise early, and take exercise between breakfast and dinner—which should be strong enough to excite perspiration.

The patient's habits and feelings must dic-

tate the kind of activity most convenient or agreeable to him.

Persons may shut themselves up so long in their room, that the idea of walking two or three miles will almost fatigue of itself: the muscles, the joints, the whole frame recoils from the thoughts of moving. The limbs will ache in a few moments, and the will has not the power to enforce obedience.

Every day you put off the habits of activity, the difficulty becomes greater. Nothing will make exercise pleasant but a constant practice of it.

Exercise, however, should not be irksome; but whatever activity is pleasant or most agreeable, is most beneficial.

Professional men should take a journey every season, or the mind and body sink.

Some persons, after spending their years in active usefulness, have retired to enjoy quietude and repose: but they have been miserably disappointed; they have found time hang heavy on their hands, and their life a burden.

The retired tradesman should be actively employed in works of charity: the affluent should visit and assist the poor and needy. Gardening, agricultural occupations, entomology, the prac-

tical study of botany, and geology also, may be found of essential service for the health and spirits, as such pursuits oblige persons to take that exercise in the open air which is so indispensable for good health.

The effects of much sedentary thoughtfulness are,—diseases which embitter and shorten life, interrupted rest, tasteless meals, perpetual languor, and ceaseless anxiety.

None so little enjoy life, and are such burdens to themselves, as those who have nothing to do. The active only have the true enjoyment of life. He who knows not what it is to labour, knows not what it is to enjoy rest. Recreation is only valuable as it unbends us: the indolent know nothing of it.

It is exertion that renders rest delightful, and sleep sweet and undisturbed.

The happiness of life depends upon the regular prosecution of some laudable purpose or laudable calling: it is necessary to our well being; it enlivens all our mental and physical powers.

The bodily imbecility and enfeebled health, invariably consequent on a sedentary life, all go to prove that we were destined to lead a life of activity, and to "eat bread by the sweat of our brow."

Robust health and great physical strength are scarcely to be met with but in the ranks of those who earn, their livelihood by bodily exertion.

A sickly habit of body is invariably incident to those whose lives are inactive, or who are subject to long and close confinement.

With plentiful bodily exertion, you scarcely can be ill: without bodily exertion, you cannot possibly be well; that is, enjoy as much strength as your system and age is capable of.

The exercise taken before breakfast is the best.

Walking is generally the most suitable exercise, as it calls more muscles into action than any other which is not positively painful.

Another advantage of walking is, that you can have a friend to walk with you, and unbend the mind and cheer the spirits by agreeable conversation.

Your bodily exertion should be sufficient to occasion quickened breathing and sensible perspiration. Exercise should not be for a less time than four hours in the twenty-four. Those who have had the courage to adopt this practice, have in a week or two been perfectly astonished at the healthful vigour and cheerfulness, and

sound sleep, and keen appetite which has followed it.

Whatever causes and habits of life may be calculated to give strength and activity to the circulation (as, for instance, bodily exertion) is clearly of importance to nutrition, and consequently to the strength of the body; "and whatever causes or habits may have a tendency to depress the energy of the circulation,—to allow the blood to creep languidly through the vessels, instead of dancing along in its channels cheerily and energetically, (as, for instance, cushioned laziness, which rides when it should walk,) must of necessity have the effect of impairing assimulation, and consequently enfeebling the strength, and sapping the very foundations of health."

Do not kill yourselves with comforts.

The hardships of life have no influence in producing disease; but, on the contrary, serve only to harden the system against it.

The seductive comforts of life, as we term them, are opiates, anodynes, narcotics,—as certainly so as opium itself, although not in so powerful a degree.

Light, and wind, and rain, and cold, and noise, are what are considered as the discomforts

of life; "but these, and the like of these, are natural whips and spurs, which keep the living actions awake," and correct the indolence of man's natural condition. These discomforts are so many incentives to exertion; many of them, indeed, becoming sources of real pleasure, by rousing the system to energy and action.

Comforts have an influence directly lulling and somniferous, and "those who are surrounded with them, are placed in the situation of opium eaters; and, like this narcotic, comforts, as we are pleased to term them, have the direct effect of lowering the tone of the system."

In all moral and mental afflictions, vigorous exertion of the corporeal powers is the best antidote to the baleful effects of the depressing passions: the deleterious consequences of moral evils are exasperated tenfold by inactivity of body.

Inactivity and despondency often go hand in hand: but with a commendable activity there is usually associated a well grounded hope—that sure and steadfast anchor of the soul.

Some employments are better than others; but there is no honest employment so bad as having no employment: the mind contracts a rust. A person must fill up his time in good, or at least

innocent business, or it runs to the worst sort of waste.

The cure of many maladies is employment. "Be not solitary. Be not idle." Rely upon it, life was not given us to be spent in dreams and reveries; but for active exertion,—exertion which turns to some useful account to yourselves and to others,—not laborious idleness.

#### REST.

The amount of sleep necessary to preserve health varies according to age and the state of the body. Infants pass much the greater portion of their time in sleep. They only wake to take the breast, and then fall asleep again. Children should sleep from twelve to fourteen hours; and during growth to maturity, a third part of their hours should be spent in sleep. In after life, a far less portion of time should be given to indulgence in bed.

To secure refreshing sleep, we should have spent a reasonable time in active exercise and occupations in the open air. The food and drink should have been suited to the powers of the stomach. The chambers should be airy, and

dry, and neither hot nor cold; the bed clothes light, but yet sufficient to maintain a proper warmth.

Sleep is sound and refreshing, according as the digestive organs are easy and quiet.

Nervous persons should not indulge in much sleep, or even lie long in bed, for by so doing it favours a determination of blood to the head and spine, and disposes to neuralgic pains.

Some individuals are of so active a disposition, that a comparatively small proportion of sleep is all they can take; while others are so inclined to sleep, that they can give way to it at any time. Both of these extremes are undesirable, and ought to be corrected by attention to the formation of habit.

Dreams are an imperfection in sleep. If the sleep is good, the functions of the mind as well as those of voluntary motion should be suspended.

Those who give way to slothfulness have their bodies bloated and easily fatigued; and their minds become torpid, indisposed for thinking, and unfitted for close application to any business of life.

Nothing is easier than to cultivate the habit of sleeping: the system demands eight or ten

hours out of the twenty-four, and will be deranged if the demand be denied.

But the whole system is prostrated by indulging in the luxury of sleep; and you are as certainly disqualified for the duties of life after ten hours sleep, as if you had overloaded the stomach with food: the body and mind are both weakened by it.

In adult persons, from six to seven hours is the medium proportion which should be given to sleep.

That excellent man and accomplished scholar Sir William Jones has laid down the following rule:—

Six hours to study give, to slumber seven, Ten to the world allot,—and all to heaven.

It is a disobedience to the dictates of nature to sleep in the day instead of the night. Such as do thus transgress, will have pale and squalid complexions, nervousness, ill health, and the term of their life shortened.

The studious, the delicate, the invalid, and those whose occupations deprive them of rest, or who are obliged to keep late hours, may nevertheless find great comfort and benefit from an hour's repose after dinner.

To those who have a very weak digestion, a

little repose after meals is of great importance. But to give too large a portion of time to sleep may be regarded as a species of intemperance.

Rise early, and your sleep will be more sound and refreshing; for all that repose can do for you is accomplished in less time if you sleep well, than a longer indulgence in bed and sleeping less soundly.

The experience of all who have attained to an extraordinary old age is in favour of the healthy tendency of early rising. And Dean Swift avers, "that he never knew any man come to greatness and eminence who lay in bed of a morning."

In order to rise early, an early hour for retiring to rest is recommended: both your health and your faculties will be benefitted by it.

We ought to sleep in the early part of the night: for one hour before midnight is worth more than two hours after that time.

If you are wakeful, and it arises from over activity of mind, endeavour to change the current of your thoughts. The frame of mind in which you close your eyes is of great importance in inducing tranquillity in the night; and, as Dr. Beddoes has observed, that those observations in books of practical piety, and those chapters in the word of God which refer to quietude of

mind, might be introduced into works on the management of the health.

A periodical reservation of a DAY OF REST is also necessary to bodily health and mental vigour.

Although the night apparently equalizes the circulation well, yet it does not sufficiently restore its balance for the attainment of a long life; hence one day in seven, by the bounty of Providence, is thrown in as a day of compensation, to perfect the repose and tranquillity of the system.

All persons who must be necessarily occupied six days of the week, require a day of repose on the seventh, and a change of ideas suited to the day; and in the course of their life they will be physically and morally gainers by it.

### LONGEVITY.

Although there is a difference in the hereditary structure of the body of different individuals, yet with better care than we usually take of our health the vital powers might be preserved to a much longer period than the tables of mortality now exhibit.

On an average, the pulse beats a hundred thousand times every day; but if by intemperance of any kind, or by the indulgence of bad passions, the heart is made to force the blood at a more rapid rate, the machinery of vitality will be much sooner worn out, its materials exhausted, and the duration of life shortened.

Life is permitted to continue under many deviations from the strict regimen of health, and even for a length of time under some grievous diseases; for there is in the constitution always a conservative principle, making efforts to remove or relieve the offending causes, and the powers of medicine come in aid of this principle, and are capable of affording, if not a cure, yet an alleviation of disease.

Overweening anxiety and unnecessary efforts to preserve the health, will, however paradoxical it may seem, have a tendency to impair it. Be not however negligent, or disregard the first approach of disease; but take good advice in its earliest stages, and your medical accounts will be short.

If you desire long life, neither physic yourself, nor trust to the chances of quack medicines.

Now and then a quack medicine may make a

remarkable cure, but no judicious person will risk his health and life by taking it.

Those pursuits which require bodily exercise, and which keep the individual for a large portion of his time in the open air, contribute most to health and longevity.

In all the instances of longevity which have been recorded, it may be observed, that every person who attained a great age, has been remarkable for moderation in eating and drinking. For men are guilty of excesses, and the effects are often transitory and unheeded; but it is of consequence to know that repetitions will in time render those effects considerable and dangerous.

Longevity cannot be attained without continence and sobriety.

In business, or pleasure, or study, do not consume in a day the animal spirits which were intended for a week; but keep the expenditure of the machinery of life within the income of health.

The strength and spirits are exhausted more by mental than corporeal labour.

Intense application for a few hours will fatigue the body, though you have not stirred from your chair. The exercise of body and that of the mind should alternately serve as relaxations to each other.

It should be known, that very great attention of mind exhausts even that nervous energy which excites muscular motion.

Many of our diseases arise, either from a guilty conscience, or a weight of care lying on the mind, or they are greatly increased by it.

Some apparently hopeless cases have been cured by a change of scene, or agreeable occupation, or relaxation from severer studies, or an overwhelming weight of business.

Mental uneasiness first disorders the stomach, and, as a consequence, the whole system suffers; and as long as great anxiety continues, the disease may change its form, but it is not in the power of medicine to restore the patient.

Thus joy will affect the circulation of the blood,—grief, the digestion. Anger will heat the frame as perniciously as ardent spirits, and fear will chill it as certainly as ice.

Do not anticipate evils which may never occur: mental apprehensions have often brought on real disease.

Right thoughts are the best anodynes for a distressed mind.

Is any sick, let him pray and be prayed for. "Prayer is a salve for every sore."

It is of essential importance to preserve peace of conscience, and resignation to the will of God; for nothing hurts more the nervous system, and particularly the digestive powers, than fear, grief, and anxiety.

A guilty conscience, fear, gloomy apprehension, and a dread of the future, sensibly affect the duration of existence, by producing disorders of the nervous system, and subsequently the other vital functions. But well grounded confidence in a wise and superintending Providence, supports the mind under every contingency.

Keep your mind well occupied, and take a pleasure in your occupation: for those thoughts which disturb the mind will destroy the health; and fretting, and continual disquiet of mind, will bring you to a premature grave.

If you are an invalid, expect not much benefit from medicine or change of air, without resignation and tranquillity of mind.

Those who are married live longer than those who are single.

Physical prosperity and moral happiness often depend on each other, and a long life depends on the union of both. Improve your physical and moral frame to the utmost of your power, that you may reap the harvest of life, which only awaits those who can succeed, to a certain degree, in raising themselves above want and ignorance.

Every family man should insure his life: for the provision which he is conscious he has made for those who are dependent upon him, will greatly contribute, under all circumstances, to give tranquillity of mind; and the rare gift of a tranquil mind, and an easy condition of life, are two circumstances which are best calculated to insure longevity. And, if snatched away, the hour of death will be alleviated by the reflection, that through this precaution a surviving family is secured from want.

The amount of human happiness secured by Benefit Societies, Savings' Banks, and Fire and Life Assurance, is incalculable. It is wise to anticipate sickness so as to alleviate its evils, and to make arrangements which deprive death of its terrors. It is a satisfaction to our minds, to believe that we have exercised a beneficial influence beyond the grave, upon the destinies of those who form a good half of ourselves, namely, our family and friends.

The cultivation of the sciences, also, is favour-

able to duration of life: such pursuits are well calculated to compose, to calm, and to fortify the mind, and hence, to produce that "quietude of soul which is a real elixir of long life."

Literary men have, in all countries, been longlived. The class of learned men who have lived more than seventy years includes the most distinguished characters that have ever existed.

The inhabitants of civilized countries live the longest. We may therefore conclude, that intellectual cultivation has contributed directly and indirectly to the preservation of the lives of men, by giving a predominance to the reasoning powers over the sensual; and the acquirement of knowledge leads to the abandonment of vicious habits.

Thus the institution of Temperance Societies have been the effect of the general diffusion of better information among the people.

The extreme profligacy, improvidence, and misery which are among the labouring classes, in many parts, and which abridge the period of life, are chiefly to be ascribed to the want of education.

Although it has been frequently said that great mental exertions in the pursuit of knowledge, or in the communication of it to others,

has the direct effect of impairing the intellectual powers, and shattering the constitution; yet this takes place only when a devotion to study does not allow of that corporeal activity, which has been, in a former section, shewn to be indispensably essential to long life and the preservation of health.

The pursuits of the learned and men of science are only injurious when they lead to habits of inactivity, and when they are unwilling to give a sufficient portion of their time to walking, riding, or other exercises in the open air.

Parents have been blamed for their eagerness in pressing intellectual improvements on their children, and many physicians are of opinion that efforts to develop the powers of the mind are very frequently injurious; but be assured that there is very little ground for such apprehensions. The cultivation of the mental powers strengthens the material organ of the mind, the brain, just as the exercise of the body develops and strengthens the muscles and joints, and produces a healthy circulation of the blood; and either one will suffer if they are neglected. Neither the health or intellect will suffer from any efforts to acquire knowledge, if the child is not confined for an unreasonable time to the school-room.

#### THE EFFECTS OF BATHING.

The shower-bath. The immediate shock from the shower bath is, in general, felt to be greater than that from simple immersion; more particularly if the quantity of water is great, its temperature low, and the fall considerable. But there is no unpleasant compression of the surface by a dense medium; and there is an access of air to the skin, and less distress to the breathing, than in plunging into the water.

In several affections of the head, and for persons disposed to such affections, the showerbath possesses decided advantages, inasmuch as the shock and refrigeration are directly applied to the head.

While in this bath, it is a great advantage for the relief of the fulness of the vessels of the head to have the feet at the same time immersed in hot water.

Affusion. Water thrown over the naked body from a large vessel, is a rude form of the shower bath, and has similar effects.

Ablution, or applying water to the surface of the body with a sponge or towel, differs from the shower-bath in being attended by a lesser shock, and consequently a feebler re-action.

This kind of cold bathing, or sponging the body, has a tendency to season the body against diseases which are produced by the cold, or unavoidable changes of atmospheric temperature, as it acts as a tonic to the system, thereby rendering it less easily affected by deleterious influences from without.

In fevers, neither ablutions nor cold bathing ought to be used, except under the direction of your medical adviser.

The COLD BATH. The effects of cold bathing vary according to the circumstances of the case, and, like all other valuable and powerful remedies, its employment requires great caution and discrimination.

A very cold bath is followed by a powerful re-action; and a cooler bath by a slighter degree of re-action, and after a longer interval. Caution is necessary at the first administering of it, lest the shock be too powerful for the energies of the system.

In cold bathing, let the immersion be sudden and complete: remain only a short time in the water; and on leaving it, use strong friction with a coarse towel. If children are terrified by immersion, bathing does them an injury.

The cold bath is not to be recommended in infancy or old age, but in the early part and middle periods of life.

It is also improper for persons affected with disease of the heart or lungs, and especially for consumptive habits. It is never beneficial for persons suffering from organic affections.

It is improper in a full habit of body, or in local fulness of vessels, as in apoplectic persons.

It is not proper for any who are affected with either acute or chronic inflammations of any of the internal parts of the body.

It ought rarely to be advised in cutaneous diseases.

Under great debility, it is also inadmissible, as then there does not exist a sufficient power to produce re-action.

On the other hand, in cases of weakness and relaxed habit, the cold bath is useful, if there is freedom from internal disease, and a sufficient power of re-action in the system. And when combined with a dry and pure air, as on the sea coast, the benefit is speedy and most remarkable.

In the summer, sea bathing is best; and in the

colder seasons, ablutions to the chest and trunk are with the same view especially strengthening.

Cold bathing, especially on the sea coast, is of essential benefit in most nervous complaints, if there is no local affection, which would forbid its use. If there is any doubt as to its propriety, as in epilepsy, the shower-bath may be substituted.

In sea bathing, many suppose that the longer they remain in the water the greater will be the benefit; but it is not so, for the animal heat is thereby brought below the proper degree to allow of healthy re-action.

If there is perspiration, or the general powers of the system have been lowered by fatigue, cold bathing cannot be practised without danger.

The best time for bathing is about two hours after breakfast; for the constitution is then so far recruited by the assimilation of the morning's meal as to insure re-action.

Sea water and mineral waters, such as contain salts or iron in solution, are more tonic, stimulant, and bracing than simple water; and when used as a cold bath, are productive of a greater degree of re-action than the latter.

Sea water is therefore always to be preferred to fresh: but if circumstances prevent going to

the coast, the bath may be rendered artificially saline, by dissolving one pound of common salt to every four gallons of water.

The WARM BATH requires less caution, and is more extensively useful than the cold bath; so that it is admissible almost at all seasons of the year, and at every period of life.

In cold bathing, nature seems to encounter a hostile power, which must be overcome before it can minister to comfort: but the warm bathing acts very differently,—it is directly grateful to the feelings.

When the temperature of the bath is from ninety-five to a hundred degrees, the whole nervous system is soothed, local irritation or pains which may be present are greatly alleviated, or are entirely removed; a pleasing languor steals over the spirits, and the general irritability of the system is greatly subdued, sometimes permanently, or at least during the continuance of the bath.

The tepid or warm bath acts as a gentle stimulus to the skin, augmenting the quantity of blood on the surface of the body, and at the same time relaxes its texture. It produces a more equable distribution of blood throughout the whole system. Its ultimate effects are to

soothe and refresh the body, and to render it more ready in the performance of its functions.

Warm bathing cannot be too highly commended: it is not enough practised in this country. Those whose circumstances will afford it, should have the convenience for warm bathing in their houses, not so much for luxury as for the purpose of contributing to health, and for the alleviation of disease.

The skin throws out perspiration, and absorbs water while in the warm bath. When the bath is hot, that is to say, above ninety-eight degrees, (the temperature of the blood,) the perspiration exceeds the absorption, and the excess progressively increases with the temperature.

The effect of the hot bath is to relax the parts which are immersed. The warm bath modifies the action of the heart, but if the heat is raised above the standard of the blood, then the pulse is quickened in proportion to the increase of the temperature.

The circumstances in which the warm bath is highly beneficial are the following: in fatigue, after great muscular exertion; after travelling; when there is dryness and heat of the skin; after long continued mental excitement, or la-

borious avocations, the warm bath is often an agreeable remedy.

The warm bath is also of great benefit in numerous diseases of a more serious nature, as in acute and chronic inflammations, accompanied with spasms; but then its employment should be under the direction of your medical attendant.

In affections of the stomach and bowels arising from indigestion, it will be found strikingly beneficial, more especially when the surface of the body deviates from the healthy state, by being unnaturally hot and dry, or contracted and uncomfortably cold; in both cases it has the effect of restoring the healthy functions of the skin, and thereby relieving the internal parts of the system.

With this view, the warm bath has been prescribed for gout and rheumatism. If there is any ground of objection to it in these diseases, it is that it is not admissible when there is great plethora of the system. Indeed, it is chiefly in the absence of plethora that its salutary effects are so evident in painful diseases of the joints; and as a simple remedy its use may be recommended in the strongest manner.

A great number of diseases of the skin are alleviated by the warm bath, by acting directly

on the disease, as well as by improving the general state of the circulation. Various sorts of saline, vegetable, or mineral substances may be dissolved in the water to make it more especially act on the local complaint; and the stay in the bath may be prolonged beyond the usual period.

Water containing salt is more tonic than pure water; but in cutaneous disorders, saline, sulphurated, or otherwise medicated baths, will be more advantageously employed under the direction of your physician; for, generally, no instructions obtained from books are sufficient to guide the inexperienced in the application of these and other active remedies. The rules for the use of medicated baths especially require to be modified according to the individual case.

With respect to the heat of the bath, there is no rule without an exception,—but any person may bathe at a temperature between ninety-five and a hundred degrees, and feel soothed and refreshed. The addition of warm or cold water may be allowed, according as it is found to be agreeable to the feelings of the patient. In very painful diseases, it is desirable while in the bath to add hot water, so as to increase the heat to one hundred and twenty degrees, or at least to as high a degree as the patient can bear it.

The VAPOUR BATH. The ordinary vapour bath may be used at a much higher temperature than that just mentioned. Water can hardly be borne higher than one hundred and twenty degrees, as the density of the medium greatly influences the heating power. In the form of vapour, however, this fluid may be employed at a much higher degree. Vapour, from one hundred and twenty to one hundred and eighty degrees of temperature, may be breathed and applied without exciting any painful feelings.

The vapour bath consequently occasions a greater degree of perspiration than the water bath, and is exceedingly useful in all attacks arising from sudden chills or cold, (this being a precursor of very many complaints,) a hot or vapour bath, by exciting copious perspiration, will check or throw off those advances of disease which, if neglected, or left merely to nature, would end in a formal and serious disease.

The WARM-AIR BATH, called the sudatorium, is very analogous to the vapour bath, and may be very conveniently used for the same purposes, though not with equal benefit, for it has not the soothing effects as the application of water. But it will have the effect of producing a speedy and copious perspiration; and has this advantage,

that it may be used while the person is lying in bed. Often the hot-air bath has been known to rouse the energies of the system, and in many cases the person has been restored in a marvellous manner, from a state of depression and weakness, to strength and buoyant spirits.

# THE EFFECTS OF SNUFF AND TOBACCO.

The taking of snuff is unnatural, and has a pernicious tendency; it spoils the features and complexion, while the employment of it in the most moderate degree is an exception to cleanliness: the excessive snufftaker is a disagreeable person.

When snuff is first used, it occasions giddiness and confusion of the head; and even in those who are accustomed to it, when taken beyond the usual quantity, it produces somewhat of the same giddiness and stupor that it did when first used.

Snufftakers are liable to go into excess in the quantity taken, besides that they are always in danger from these effects operating in an insensible manner on them. It has similar effects to

the long-continued use of other narcotics, such as wine and opium; that is, it produces dyspepsia, tremors, loss of memory, and other symptoms of the weakened or senile state of the nervous system.

Inhaling the vapours which result from the combustion of tobacco, though very prevalent, is a practice which cannot be indulged in, for any length of time, without injury to the health; and indeed, the pallid countenances, debilitated frames, and deranged digestion of many of the young men of the present day, amply attest its noxious influence.

Smoking has the effect of spoiling the appetite: it is an encroachment on the freedom of others; it is an idle habit.

From much smoking, all the same effects may arise which we have said to result from excess in taking snuff. In addition to which, it dries the mouth and fauces, and occasions a demand for drink, and a waste of saliva, which is a fluid so necessary to digestion: this, together with its narcotic powers, weakens the tone of the stomach.

In some cases of asthma, however, it produces expectoration, and therefore may be used medicinally.

Chewing tobacco occasions a still greater waste of saliva than smoking, and the effects of this are impaired digestion, and a certain degree of emaciation.

## THE EFFECTS OF THE STATE OF THE MIND ON THE HEALTH.

THE mental constitution is worthy also of the deepest attention of every one who appreciates the culture of the moral feelings; for the reception of truth exerts a power in controling the tempests of the heart, and improves the condition of the nervous system.

Moral health, therefore, has a tendency to preserve physical health. And you are likely to rest soundly if you have a quiet conscience.

Let the person whose hours are marked by sorrow be compared with another who lives in peace of mind, and the difference of the process of nutrition in the one and in the other will be easily seen.

Fear suspends the course of the bile, disorders the circulation, and consequently the secretions, and, indeed, hastens the death of weak-minded and timid persons. It is one of the most powerfully depressing affections of the mind, debilitating and depressing the nervous system, producing a languid state of the heart, and arresting the powers of the muscles.

Extensive speculations, where there is risk of property, are attended with anxiety and a multitude of cares, which interrupt the digestive phenomena, and then the effects are not confined to one organ, for in succession all the viscera suffer, then the circulation, and ultimately the animal and mental powers become prostrated.

A fearful solicitude plunges the system into that state of debility which predisposes to fatal impressions, while the moral force of confidence, communicating its aid to physical energy, enables it to repel many disorders.

In epidemic diseases, those who are alarmed are ordinarily the first victims.

Resignation and confidence are important elements for the healing our maladies.

That mental feebleness which renders persons perpetually solicitous about their health, makes them effeminate and unhappy.

Do not fix your thoughts on the functions of life, or you will first imagine yourself sick, and then become so.

Many nervous persons want not so much

physic as occupation or diversion; hence change of scene and company frequently effects a cure.

How many are there who, while at home, moping about with dull companions, or no companions at all, feel pains in the shoulders and in the back, or in the chest—have dizziness in the head—black specks floating before their eyes—sudden startings and twinges, and so on? how many are there tormented thus, who, when some brisk and lively and intelligent friend appears, capable of rousing the attention, and setting the spirits in a glow, actually forget all their complaints, and feel for that evening or morning, as the case may be, in excellent health?

Let it therefore be your study to cultivate that sound condition of mind by which its powers are not kept in subjection to the mere objects of sense.

Good spirits may be called the balm of our existence. But avoid fretfulness under trials, and endure afflictions patiently and with resignation to the will of God.

There is no temper so good, that it does not need attention and cultivation; and no temper so bad, but that, by proper culture, it may become pleasant. Be not moved by the little troubles which will inevitably meet you; for



impatience will mar your present peace, injure you in the eyes of your acquaintance, and bring on premature decay.

Be assured there is a particular Providence which regulates the whole course of worldly events, and which is intended to discipline us to a just knowledge of our dependent state, and dispose us to humility, to reflection, and to piety.

Finally, seek a safer guide to happiness than can be furnished by human wisdom, by making God's word at once the rule of your conduct, and the regulating principle of every emotion of your heart. Resign yourself to His guidance, and ask His powerful aid, both for your conduct through this life, and your preparation for the life to come. Thus the pressure of the ills of life will be lightened; and you shall endure, as seeing Him who is invisible.

THE END.









